US Army Corps of Engineers

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MAY-JUNE'S THEME:

Technical Conferences

DON'S THOUGHTS

Ladies and gentlemen, it is a great honor and privilege for me to serve as the U.S. Army Corps of Engineers Chief of Engineering and Construction. This month I celebrate 35 years with this great organization, and I can't think of a greater gift than being asked to lead the E&C community. We, collectively, have a number of challenges ahead of us, but I am confidant that working together we can achieve great things if we are willing to change. As someone once said you can't expect to solve the problems of today with the thinking of the past. As the world changes, customers' requirements change, technology changes, and as the nation's interests change we must adapt or become irrelevant. Throughout the U.S. Army Corps of Engineers 228 year history we have always adapted to meet the needs of the nation. I am confident we will continue to do so.

The Chief of Engineers gave me two broad objectives; 1) continue to build relationships with the private sector and professional organizations, and 2) enhance our E&C technical capability until we are truly the "world's premier public Engineering organization". These two objectives are applicable at all levels of the Corps and must be worked simultaneously or we will struggle to succeed. This is a "must do" team effort both within the E&C community and across all functional elements. While I will champion first and foremost the E&C causes, it must be done in context with and not in isolation of the rest of the Project Delivery Team, again at all levels. It has been my pleasure to serve at the district, division, and now HQ levels of this great organization and I am convinced that we have great people at all levels doing great work in service to the nation.

We are first and foremost public servants entrusted by the American people to manage their money wisely and in their best interests, not ours. Public service is one of the oldest and time-honored professions in the world and we should never forget that or take it lightly. We are here to serve the people, not to serve ourselves or promote our own best interest. We must look beyond what we think is best for the field office, area office, district, division and HQ to do what is best for the Corps in serving the people of this great nation. I challenge all of you to think first and foremost about being a public servant and doing what's in the best interest of the people we serve. In some instances it may not be in your best interest, but trust me, in the end it will be and more importantly, you will be proud of the contribution you made.

I will continue the great work already underway with respect to our technical competency through efforts like the VE, Dam Safety, H&H, and Construction Capability Assessment Reports. Many good recommendations in these areas have been approved; now we need to move out and implement.

DON'S THOUGHTS (CONTINUED)

Additionally, there are many other areas that need attention. I will be developing an overall strategy over the next couple of months so we can move out smartly. I will be calling on many of you to help in this effort, so be thinking about all the smart things we can do. Some ideas will come about through the current FAA process, but many details will need to be worked through.

With respect to relationships I will strive to have once again many of our E&C community serve in prominent leadership roles on boards and committees of the major professional organizations. As the world's premier public engineering organization we must lead to set the standards for others in public and private sector organizations. We have the talent and expertise; it's time to be engaged.

While there appear to be many competing interests that go against us being the world's premier engineering organization, i.e. A/E contracting percentages, outsourcing, third wave, etc. they really are not. In the end it's all about the federal government being the most efficient and effective at what it does best. We must determine our "core" competencies necessary to deliver engineering and construction services and the level at which it must be maintained to stay proficient across the Corps and then work to maintain that level. This may mean we will not have 41 full service districts in the future if the current workload trend continues over the next few years as expected. In the coming weeks I will share my thoughts on Training and Development, model development, ITR's, Leadership Development, regionalization, Environmental Operating Principles, and many more important topics.

My intent is to get out and meet as many of you as possible in the next 6 months. If I am in your area, I will be looking to meet you and discuss USACE challenges and your proposed solutions to these challenges. I will admit I do not have all the answers and so I will look to you for finding new ways to solve your concerns and maintain the USACE image and reputation. Please feel free to send me your thoughts and ideas on how we can improve.

Again I am honored to serve as your Chief of Engineering and Construction and look forward working with you in service of this great Nation.

Essayons!

Don

(Editors' note: If you want to share your thoughts with our readers regarding Don's Thoughts send an email to the E&C News editor (charles.pearre@usace.army.mil). A synopsis of your comments will be published in the next issue.)

ARTICLES

THIS PUBLICATION WILL BE ISSUED ON A MONTHLY BASIS AND DISTRIBUTED BY E-MAIL AND POSTED ON THE INTERNET AT HTTP://WWW.USACE.ARMY.MIL/INET/FUNCTIONS/CW/CECWE/NOTES. IF YOU WOULD LIKE TO CONTRIBUTE ARTICLES OR HAVE SUGGESTIONS FOR FUTURE ARTICLES, PLEASE CONTACT CHARLES PEARRE, CECW-EP, 202-761-4645.

New Chief, Engineering and Construction Division

DONALD L. BASHAM, P.E.

The Chief of Engineers appointed Donald L. Basham, P.E., as Chief, Engineering and Construction Division, Directorate of Civil Works. Mr. Basham replaced Dwight A. Beranek, P.E., who moved up to the position as Deputy Director of Military Programs. Mr. Basham came on board in mid-March. This issue of Headquarters, Engineering and Construction News began with a welcome message from Mr. Basham.

Mr. Donald (Don) L. Basham is a member of the Federal Government's Senior Executive Service and came to Engineering and Construction Division from Vicksburg, Mississippi where he was the Director of Management Directorate

for the Mississippi Valley Division/Mississippi River Commission. He is a 1970 graduate of the University of Louisville, Speed Scientific School. He also received a master's of science degree in civil engineering (1971) from the University of Louisville.

Prior to his last assignment, Mr. Basham served as the Director of Engineering and Technical Services in the Mississippi Valley Division. Other previous assignments included Deputy District Engineer (PM) of the U.S. Army Corps of Engineers, Louisville District; a nine-month appointment as the Director of Engineering and Technical Services in the Ohio River Division Office in Cincinnati, Ohio; Deputy Chief of Programs and Project Management Division, Deputy Chief of Construction Division, Area Engineer where he oversaw civil and military construction at Fort Knox, Indiana Army Ammunition Plant, Jefferson Proving Ground and numerous civil works and EPA sites throughout Kentucky and Indiana. Mr. Basham began his career with the Corps in the Louisville District as a student trainee in the Engineering Division.

Mr. Basham is a member of the National Society of Professional Engineers and Society of American Military Engineers. He is a licensed engineer and land surveyor in the state of Kentucky. Mr. Basham has received numerous awards and decorations during his Federal service, including being named the Corps of Engineers Civilian of the Year in 1998. Mr. Basham is married and has two daughters.

POC: CHARLES PEARRE, CECW-EI, 202-761-4645

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Technical Conferences

2003 INFRASTRUCTURE SYSTEMS CONFERENCE

The 2003 Infrastructure Systems Conference, which took place on 6-8 May 2003 at the Bally's Hotel in Las Vegas, Nevada, was a great success. The conference was sponsored by the Engineering and Construction Division of the Corps of Engineers, in partnership with NAVFAC and the Air Force. The conference hosts were South Pacific Division, Los Angeles District, and Sacramento District. After the opening session, which included keynote presentations from LTG Flowers, RADM Johnson and Dr. Get Moy, the conference broke up into 16 technical workshops, encompassing Security Engineering, Structural Engineering, Electrical Engineering, Mechanical Engineering, Geotechnical Engineering, Materials Engineering, Specifications, Dam Safety, and Construction. The conference emphasized incorporating security and safety in DOD and national infrastructure systems. The approximate number of persons who attended the conference was 1600. This included over 1100 engineers, scientists and technical persons who registered as attendees, and approximately 450-500 exhibitors who supported the 180 exhibitor booths. Over 350 technical sessions were presented. Up to 30 PDH's were earned by the attendees. Work will be starting soon to plan the next conference in 2005. Here is what one of the exhibitors had to say about the conference.

> *"Please, accept our thanks and gratitude for a job well done on the 2003 ISC. SEI Group, Inc. made alot of new friends as they visited our booth during the conference. We really appreciate the conference structure, which encouraged visits to the exhibitors.*

Our president, Eloy Torrez, was most impressed with the seminars and working sessions, as well. In fact, he asked me when we might have access to the actual presentations. Did I hear an announcement that the presentations would be placed on the website in the near future?

We're looking forward to exhibiting at the next Infrastructure Conference, too!"

POC: ROBERT DIANGELO, CECW-ET, 202-761-5543

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USACE ARCHITECTS MEET IN SAN DIEGO

On 5-9 May 2003, approximately 85 USACE architects met in San Diego, California to attend the USACE Architects Training Workshop in conjunction with the American Institute of Architects (AIA) Public Architects Workshop and the AIA Convention and Expo.

This week of activities was first coordinated in 1999 when Larry Delaney, the Chief Architect - Corps of Engineers, proposed to the AIA the importance of public architects to the built environment and that the AIA should recognize public architecture of excellence. Because of this Corps initiative, the AIA, in 2000, held the first Public Architects workshop in conjunction with its convention and has continued to do so since.

The USACE Architects Training Workshops have been scheduled during the AIA convention week to take advantage of this opportunity for public and private architects to meet, participate in educational sessions for CEUs to maintain licensing requirements and to walk the convention floor to view new architectural and sustainable products. At this year's workshop, the guest speakers were Ms. Chris Hinton-Lee, first architect to be selected into a Corps SES position (Ms. Hinton-Lee will be Military and Technical Director, CELRD), Mr. Phil Hunt, Deputy Chief, Programs Management, HQUSACE and Mr. Lindy Wolner, Strategic Planner, HQUSACE Command Planning Group.

The highlight of the week's activities was LTG Flowers' attendance on 8 and 9 May. On the night of 8 May, LTG Flowers met with the USACE architects for an icebreaker and later on had dinner with about 20 Corps architects. On 9 May, LTG Flowers walked the convention floor and met with Corps architects at the Corps of Engineers Federal Agency Interview Program booth. Also, LTG Flowers held a "townhall" with his architects at a scheduled luncheon. In attendance at this luncheon were Mr. Dwight Beranek, HQUSACE, Deputy Director Military Programs and Mr. Don Basham, HQUSACE, Chief, Engineering and Construction Division. Representatives from the AIA attending the luncheon included the President, President elect, AIA Chief Executive Officer and Vice President for AIA Relationships.

Special thanks to Frank Norcross, Jeff Hooghouse, Jesse Kidd (HQUSACE) and Frank Chui (CESPD) for their efforts in bringing it all together and to the attending USACE architects for their participation and input during this very important and rewarding week.

POC: ALBERT YOUNG, CECW-EI, 202-761-7099

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WATERSHED SYSTEMS CONFERENCE

The Corps' Hydrology and Hydraulics community convened 13-15 May 2003 at the Doubletree Hotel in the Lloyds Center in Portland, Oregon for their Spring 2003 Watershed Systems Conference. The objectives of the conference are to provide a forum for Corps leaders to address timely issues of particular interest to the H&H community; for Corps staff to learn about the activities of their

colleagues in field offices, laboratories, and centers; and to establish peer networks of professionals with similar interests. The Conference was hosted by Northwestern Division and was a great success.

The conference provided general sessions including discussions of the Corps' Watershed and River Restoration Activities with presentations by Nature Conservancy and United States Fish and Wildlife Service. The conference included presentations from Fred Caver and Don Basham and a field trip to Bonneville Dam. The conference provided multiple technical workshops, encompassing Watershed, River and Ecosystem Modeling, Statistical Methods, Multi-Purpose Reservoir Operations, Ecosystem Restoration, Upper Mississippi River Basin Flood Frequency Study, Sediment Processes, Corps Water Management System, Geospatial Support, Fishery Hydraulics, and Hydraulic Structures.

LTG Flowers made a presentation during the closing session on the topic "Corps Environmental Operating Principles". The theme of the conference was Watershed Systems and this was the first meeting of the water resources hydrologic and hydraulic community of practice within the Corps since April 1996. Approximately 200 attended the conference, including representatives from all district and division offices and research and development laboratories. Over 115 technical sessions were presented. Up to 24 PDH's were earned by the attendees.

POC: JERRY WEBB, CECW-EW, 202-761-8560

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Update

ISO 9001 CERTIFICATION

Huntington District Engineering and Construction Division is officially ISO 9001:2000 Certified. Our certificate, received last week, was effective 25 April 2003. We have invested significant resources in this initiative and were successful in having our Engineering-Construction Business Process certified. We expect payoffs to continue far into the future.

Though we, and the few others who have done so, see this as a huge accomplishment, this is more a start of our journey and not the finish to a race. Our certification is public notice and documentation that we have a verifiable quality process in place. We are committed to continually finding new and better ways to deliver ever increasing quality products and services to our customers and stakeholders.

We stand ready to be a resource for the USACE family when others wish to undertake this journey. Mr. William A. (Bill) Miller of the LRH-EC staff is our resident expert and will share our corporate experience with those who ask

POC: ALFRED L. BRANCH, CELRH-EC, 304-529-5254

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BETTER CUSTOMER SERVICE THROUGH REGIONAL TEAMWORK

When U.S. Army Corps of Engineers districts share expertise, a single district can serve as the local door to the Corps for the customer while bringing the resources of the entire Corps to the table. A prime example is the Air Force air traffic control tower program.

During the past four years Little Rock District has worked in partnership with Air Education and Training Command and other Corps districts to replace outdated Air Force air traffic control towers.

It started in fiscal 1998, with a partnership between the district and Little Rock Air Force Base with the objective of replacing an obsolete control tower using the Air Force's guidance. AETC, LRAFB's higher headquarters, was so pleased with the work and implementation of the design guide that it asked the district to handle all its tower replacements.

Bert Cruzan of AETC complimented how the district coordinated the tower replacement. "Little Rock District did a good job on the tower for Little Rock Air Force Base, and we wanted to use one district to ensure that the lessons learned were incorporated," Cruzan said.

Little Rock went on to design, manage or provide technical assistance on tower jobs from the Gulf Coast to the Pacific Coast. By involving talent from multiple districts, as well as the Air Force, the players attained synergy. The outcome was that delivery of the towers was better than any single project manager or district could ever achieve alone. AETC this year even nominated Little Rock for Outstanding Army Military Construction District and Project Manager awards.

Jim Pfeifer, program manager for the control towers, said regional teamwork with other districts made the Corps much more effective. He explained that when working on towers at bases within other Corps Districts, Little Rock worked through the local Corps project managers. "We built on those relationships that had already been established between the geographic districts and the installations," Pfeifer said. "We didn't try to replace them." Meantime, Pfeifer's role as program manager ensured continuity at these widely dispersed bases.

Personnel from other districts also said it was a good partnership because they gained from each other's expertise and because it was part of the Corps commander's plan. "I thought it was along the lines of Lt. Gen. (Robert B.) Flowers' idea of having a lot of talents within the Corps that we could draw from across district lines," said Otto Ford III, a project engineer with Mobile District.
Little Rock District continues to work on towers, but as part of a learning organization, it has shared with other districts the knowledge it gained. Since the first control tower project Little Rock personnel have continually compiled design reviews and a shared database of lessons learned. This benefits other districts and the customer.

Pfeifer said people from other districts have contacted Little Rock District for input on control tower design. "We want them to know what we did so they can learn from our work as well as our mistakes," he said. Gary C. Young, a Little Rock District architect, said having established lessons learned helped catch mistakes before they could happen on other projects. Young said he believes it is beneficial for all districts to work together to learn each other's working style. "If we work with other districts and they do things totally different from us, that can slow things down, sometimes costing time and money," he said. "When we do things using the same methods and procedures, it benefits both districts."

The district had various tower projects in progress at the same time. Young said this is why the lessons learned database was beneficial, though sometimes, new obstacles still occurred. "Although we had lessons learned from the first tower, sometimes they didn't apply to the following projects. So, we handled the situation, added it to lessons learned and moved on."

Nancy S. Perkins, a civil engineer technician with Tulsa District, said teaming up with Little Rock District was beneficial to the project's success. She said the personnel were professional, and she enjoyed working with them. "The Little Rock personnel, and especially Gary Young, were quick to

get responses to our request for information," Perkins said. "When questions came up, they were shared by Young with everyone so that even bases that had not reached a certain point were aware of potential future problems. There was always someone who had just finished in that area and would respond back to everyone with a good resolution to the problem. "Little Rock was willing to listen to suggestions and provide good insight as to why something was done or designed a certain way," Perkins said. "I do believe that it helped to develop a closer bond with other districts and especially for me with Little Rock. I like to get a chance to meet some of the people I just talk to on the phone or by e-mail."

The database has added to the body of knowledge that districts can tap not only for air traffic control towers, but also for insight to improve the Corp's ability to work across district boundaries on any project. For proof, just take a look at what Little Rock has now done at Pine Bluff Arsenal for the Army Materiel Command.

The district utilized the same principals to design and build a Child Development Center at the arsenal. The customer was so pleased, that Little Rock's prototype designs are being incorporated into other centers for the Department of the Army, and the district is once again sharing lessons learned across district boundaries. How's that for an organization learning to do it right?

POC: JAMES PFEIFER, CESWL-PM, 501-324-5667

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DOOR AND HARDWARE INSTITUTE (DHI) SELF-STUDY GUIDEBOOK

DHI has recently introduced a Self-Study Course on Fundamentals of Architectural Doors and Hardware. This self-study course provides a comprehensive introduction to all the industry's products and their applications. This is not a replacement for the Architectural Hardware Specification and QV Prospect classes but does provide an excellent training tool for field offices.

This Course provides in-depth training on all architectural hardware products and their applications, wood and hollow metal doors and frames, access control products, basic blue print reading, reading specifications and schedules, job site management, and more.

The lesson content for DHI's Fundamentals of Architectural Doors and Hardware Self-Study Course comes on three CD-ROMs, each supported by a printed guidebook. There are 15 lessons in the complete course. Each lesson is accompanied by an interactive quiz that provides instant feedback on your answers and grades you automatically. Your quiz report cards can be saved or printed and submitted for a certificate of completion from DHI, or for submission to CSI or AIA for continuing education credit. For more information about this course, log on to www.dhi.org/educat/interactive.htm

If you have questions please call Bill Travis, Director of Marketing, Door and Hardware Institute at (703) 222-2010 or e-mail him at btravis@dhi.org.

POC: BRAD JAMES, CECW-ET, 202-761-5541

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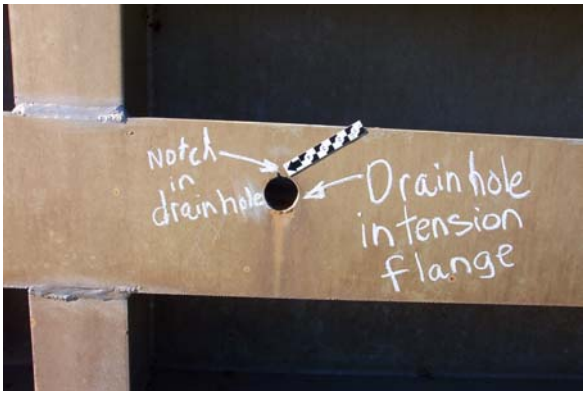
HYDRAULIC STEEL STRUCTURES

This message was received from an inspector in the field after an inspection of a Hydraulic Steel Structure (HSS).

Thought you guys might appreciate this. These are The Dalles Fish Unit Draft Tube Bulkheads that I inspected Monday. First time I've run across drain holes in tension flange (skin plate is on compression side), let alone w/ the notch. Burning machine is supposed to start in middle of hole and work out, not outside hole and work in. Good thing this HSS wasn't subject to cyclical loading or this would have cracked right across tension flange. For goodness sakes, can't imagine an engineer even wanting to drill hole in tension flange -- it removed 2" out of an 11" wide plate.....



Constantly amazing what you find in the field during the inspection. It reinforces the need to inspect ALL HSS's (even bulkheads w/o fracture critical members (FCM)) -- many engineers catalogue bulkheads as low priority HSS's because they aren't FCM. The fact that they don't have FCM may be true, but many other things come into play regarding the safety of HSS's and only way to discover those is performing thorough inspection.

This is shared as another lessons learned example of bad things being done to existing HSS by people who do not understand fatigue/fracture concepts.

POC: JOE HARTMAN, CECW-EI, 202-761-0301

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INSPECTION CHECKLISTS FOR TAINTER AND LIFT GATES

Work under the recently terminated O&M Management Tools research program included development of simplified checklists for guiding the collection and evaluation of inspection information for structural, mechanical, electrical and operational components of tainter and lift gates. The work was completed by the U.S. Army Engineer Research and Development Center's Construction Engineering Research Laboratory (ERDC-CERL). A publication containing these checklists will follow.

The intent of this work is to provide a less intensive alternative to condition indexes developed under the Repair, Evaluation, Maintenance, Rehabilitation program (REMR). Preliminary indications are that this objective was successfully met. The development panel used these checklists during field visits and found that the criteria increased inspection efficiency by focusing attention on the critical items and added only very minimal time for recording the information. In the course of development, it also became clear that many elements of the gate infrastructure and operation required for dam safety are not comprehensively considered within one single process, creating significant risk that important components may not be fully considered. This is particularly important for operational aspects during extreme events.

Closely related work in the Risk Analysis for Dam Safety research program has focused on developing fault trees to assess the importance of the components for safe operation of dam gates. Within the tree framework, users can more easily identify the impact of parallel and series relationships on component importance as well as explicitly consider the relationship between components serving one gate and those required for all gates.

The researchers working on these products would like to perform field tests of these products in FY03. If your District has one or more candidate dams, please contact Stuart Foltz at ERDC-CERL-CFF, ph 217-373-3487, Stuart.D.Foltz@erdc.usace.army.mil.

POC: STUART FOLTZ, CERD-CF-F, 217-273-3487

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2002 ASCE Honors and Awards

Jeb S. Tingle wins the Collingwood Prize for his paper "Engineering Properties of Sand Fiber Mixtures for Road Construction," which appeared in the March 2001 issue of ASCE's Journal of Geotechnical and Geoenvironmental Engineering. The Collingwood Prize is awarded to an author less than 35 years of age whose paper describes an engineering project with which the author is directly connected. The paper provides a demonstration of the balance between fundamental research and application through the development of discrete synthetic fibers for road construction applications. It also describes a laboratory research effort carefully designed to isolate the effect of independent variables on the reinforcement potential of fiber-reinforced sands. Tingle is a research civil engineer in the Geotechnical and Structures Laboratory at the Engineer Research and Development Center, in Vicksburg, Mississippi. The primary author or coauthor of more than 30 technical papers and reports, he received the U. S. Army Waterways Experiment Station Director's Research and Development Achievement Award for his work on developing fiber stabilization technology.

POC: DAVE PEZZA, CECW-EW, 202-761-4889

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Multi-Agency Effort to Ensure Safety of Endangered Birds

If we take a boat ride beginning from the southern tip of Texas, travel east through the Gulf Coast, all the way up the east coast to New Jersey and then continue inland into a spur channel into Long Island's Great South Bay, Moriches Bay, and Shinnecock Bay, we would have traveled the Gulf and Atlantic Intracoastal Waterway.

Within these bays is the Long Island Intracoastal Waterway, a small portion of the entire water system, and the location for the New York District's Long Island Intracoastal Waterway Dredging Project, a multi-agency effort that is using dredged sand to create a habitat for several species of endangered shore birds.

The Atlantic Intracoastal Waterway, built in the 1930s and 40s, was designed so that small vessels, fishing boats, transportation vessels, private vessels, and small barges can travel along the coast without having to head into the ocean where the seas are rough. In the case of Long Island, small vessels are able to travel from the Fire Island Inlet all the way to the Shinnecock Canal in a sheltered environment.

Approximately every eight years the Corps has dredged the Long Island Intracoastal Waterway, a span of approximately 33.6 miles, from the Town of Patchogue to the south end of the Shinnecock Canal. The dredging eases the way for boat travel. Dredged material is placed on upland sites on the mainland and ocean barrier islands.

"We used to wait until there was a lot of shoaling, or sand buildup, in the channel before we dredged," said John Tavolaro, chief of Operations Support Branch, New York District.

However, in the last few years, the district has found itself in a dilemma because of a growing Long Island population and the building of homes on these upland sites, this was no longer an option.

"Homes and marinas are built on many of the areas where we used to deposit sand," said Tavolaro. "We tried to think synergistically and creatively – outside of the box," said Tavolaro. "We looked at what other districts along the Atlantic Intracoastal Waterway were doing with their dredged sand." Baltimore District and Mobile District are successfully using their dredged material for beneficial uses including creating "artificial islands," wildlife habitats, marshes and oyster beds. Other districts, including Norfolk and Galveston, are dredging "bite size pieces" of their Intracoastal Waterway every year instead of dredging larger areas every few years. The New York District's plan was to combine both concepts.

The District assembled a team to look for opportunities to enhance the environment with dredged material on Long Island. Team members included staff from the U.S. Fish and Wildlife Service, U.S. Coast Guard, New York State Department of Environmental Conservation (Region 1), New York State Department of State, National Park Service (Fire Island National Seashore), and the Town of Brookhaven.

Tavolaro said, "By doing what these other districts are doing - dredging more frequently in smaller areas -- we will only need a few smaller places to dispose the material each time. Instead of dredging 200,000 cubic yards and 25 miles of channel, we will dredge only 80,000 cubic yards in one segment of the bay."

In September 2002 the Long Island Intracoastal Dredging Project began. The team decided to place the dredged sand on East Inlet Island, a 30-acre island one-half mile off the Town of Moriches mainland, to enhance habitat for several endangered shore bird species, including least terns, common terns, piping plovers, and roseate terns.

In recent years, these bird populations have dropped due in part to increasing human development and recreation on or near the coast where they migrate in the springtime to colonize, nest and breed. The Long Island coast is one of their nesting areas. In the fall they fly south to spend their winters in regions including Florida, the Gulf Coast of Mexico, the Caribbean, and South America.

"Placing the dredged sand on an island is better for the birds than dumping the sand on the mainland," said Tavolaro. "Placing the sand on an island that is relatively untouched by people and other predators gives the new habitat a chance to survive and thrive. An island is more protected than a mainland area. It has water around it. Just a few feet of water is a deterrent to many predators."

Operating from at the Moriches Bay Coast Guard Station, Innerspace Services, a Maine contractor, conducted all of the dredging from mid October 2002 to mid January 2003, outside the region's winter flounder spawning season, public recreational activity, and the months the birds are around. "If one bird showed up we might have had to close up shop. We couldn't afford such a contingency," said Tavolaro.

The company dredged approximately 5 miles of the Moriches Bay from the Village of West Moriches to the Village of East Moriches. They dredged 1300 cubic yards of sand a day, to an authorized depth of 6 feet below mean low water, said Jodi McDonald, project manager. "The dredged sand was pumped onto the East Inlet Island by a hydraulic dredge and pipeline into a specified disposal area.

The sand was pumped into a diked disposal area and then regraded to achieve the proper slope and texture preferred by nesting birds."

"To help encourage the birds to nest on the island, we made the habitat more friendly by de-vegetating the island and building nest boxes to replicate the habitat needs of these threatened and endangered shorebirds. In addition, we placed string fencing and interpretive signage reminding the public that the area is restricted from human use. To ensure project success we also developed a predator control program, in the event land predators, such as foxes, feral cats or raccoons, are identified on the site. The area will be maintained and monitored by biologists from the U.S. Fish and Wildlife Service, the Town of Brookhaven (the island's owner) and the New York State Department of Environmental Conservation," said Steve Mars, supervisor of the Long Island Field Office of the U.S. Fish and Wildlife Service.

"The agencies combined their goals and desires and came up with something innovative where everyone won," said Tavolaro. "The U.S. Coast Guard received a cleared bay channel so they could more effectively perform their search and rescue operations; the State of New York received environmental enhancement of a degraded upland area and preserved an island, many of which are disappearing in the region; the U.S. Fish and Wildlife Service got a net environmental benefit for endangered species they are responsible to manage, and the Corps fulfilled its navigation mission while making an effort to benefit the environment, at no additional cost to the taxpayers. It's a win-win-win-win-win situation."

The $1 million project was funded entirely by the Federal Government. Tavolaro hopes that the success of this project is a catalyst for future similar work on the Long Island Intracoastal Waterway. "The stakeholders are very much in favor of this type of work. The Town of Brookhaven and the U.S. Fish and Wildlife Service are even suggesting other islands to us," he said. "If this goes as we hope and we see birds nesting there in the spring, I think this will reinforce the importance of such a project."

POC: JOANNE CASTAGNA, CENAN-PP-C, 212-264-1230

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Bridge Back Home in "Its Dotage"

The Doty Road Bridge has carried vehicles over New Jersey's Ramapo River for over a century. Recently, the New York District found a home for the retired landmark in Phoenixville, Pennsylvania where it was originally constructed and where it will continue to serve the public.

The Doty Road Bridge was named after the Doty family, early settlers to Oakland Borough in Bergen County, New Jersey. The single lane, 80-foot long bridge was constructed in 1891 and spanned the Ramapo River in an area traditionally called "The Ponds."

Bergen County requested a bridge be constructed after winter floods swept away the bridge that stood before it in the late 19th century. They purchased the Doty Road Bridge, a 5-panel, wrought iron, Pratt Pony Truss Bridge with Phoenix Columns, from the Phoenixville Bridge Company, a wholly-owned subsidiary of the Phoenix Iron and Steel Company, located in Phoenixville, Pennsylvania.

Bergen County literally found the bridge by thumbing through a catalogue. The Doty Road Bridge was a "catalogue bridge." The Phoenixville Bridge Company sold hundreds of bridges, viaducts, and highway spans in the United States and Canada through their firm's trade catalogue. Whole bridges were pre-fabricated by the company in an almost kit-like fashion. The customers ordered the parts they needed. The parts were shipped to local engineers who customized the designs for their particular location. All of the bridge panel sections were sent to the job site with all of the riveting work completed. The only thing that local engineers had to do was literally "pin" the bridge together.

Many of the bridges were constructed using the bridge company's famous Phoenix Columns and truss designs, invented by the company. The Phoenix Column is hollow and circular and made up of four, six, or eight wrought-iron segments that are flanged and riveted together, thus forming a column. Phoenix Column truss bridges were widely used in the late 1800's because the column facilitated the erection of tall structures eliminating the requirement for heavy, thick load-bearing walls and also because of it's application to the construction of bridges, viaducts and elevated rail lines.

In 1983, the bridge was condemned because of its poor condition and another bridge was inserted through the middle of the original structure relieving the old bridge from carrying any traffic. In 1989 the structure was determined eligible for listing in the National Register of Historic Places.

The Doty Road Bridge is located where the New York District's Ramapo River at Oakland Flood Control Project is currently under construction. Several years ago it was determined by project managers that the bridge would be an obstruction during floods and that it should be removed and replaced by a new bridge by the New Jersey Department of Transportation. The New Jersey Historic Preservation Office stated that something needed to be done with the bridge in terms of mitigation because it is a cultural resource.

Lynn Rakos, a New York District Archeologist took the lead in finding a home for the bridge, particularly its trusses because the rest of the bridge was deteriorated. Rakos said, "Our goal was to provide it to a non-profit, at no charge and to make sure it would still be accessible to the public."

Rakos marketed the trusses nationwide. She called historical societies, distributed fliers and marketing materials to state park managers and engineers, and placed an advertisement in *Preservation Magazine*. She received emails and calls from a wide range of individuals. "Engineering professors, interested in the bridge's history, told me that they would like a piece of the truss and another man wanted to place it by a stream on his ranch in North Dakota," said Rakos.

One of Rakos' more interesting calls came from the Phoenixville Area Economic Development Corporation (PAEDCO), a non-profit organization that is trying to bring economic life into Phoenixville, Pennsylvania. The New York District, after evaluating all of its offers decided to work with PAEDCO. PAEDCO, in cooperation with the county and state, purchased 27-acres in northern Phoenixville to create a park. The plans for the park include creating walking and biking trails along French Creek and to place the trusses of the bridge over the creek connecting the park to the trails, as decorative.

PAEDCO "purchased" the truss for a symbolic dollar. After years of searching for a home for the bridge, on a rainy and cold day on December 11, 2002, the bridge was disassembled and trucked from Oakland Borough, New Jersey to Phoenixville, Pennsylvania where it was crafted over a century ago.

"We sent the bridge home in its dotage," said Rakos. She adds, "It is unique that bridges get moved. This doesn't happen too often. With the enthusiasm of PAEDCO, I have confidence it will be a happy ending."

POC: JOANNE CASTAGNA, CENAN-PP-C, 212-264-1230

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MEET ENGINEERING AND CONSTRUCTION DIVISION TEAM LEADERS

David A. Pezza, P. E., Civil Engineer, is Site Development Team Leader in Water Resources Branch. Dave Pezza came to headquarters in December 2001 from the New England District. He previously was with the Norfolk District. He is the Site Development Team Leader in the Water Resources Branch of the Engineering & Construction Division, under the Civil Works Directorate. He serves as the Corps' principal geotechnical engineer. As Team Leader, he oversees a team of geotechnical, civil (site), and structural engineers for the development of technical policy, criteria, and standards for civil and military engineering and construction programs.

He has undergraduate engineering degrees from Saint Francis College and Penn State University, and a masters degree in engineering from Old Dominion University. He is a Fellow Member grade in the American Society of Civil Engineers (ASCE), and a member in the Society of American Military Engineers, the Association of State Dam Safety Officials, and the U. S. Society of Dams; serves on academic boards for Old Dominion University, Northeastern University, and the U. S. Coast Guard Academy; and is newly appointed to the Editorial Board for the ASCE Geo Institute Geo-Strata magazine.

POC: HARI N. SINGH, CECW-EW,202-761-8648

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Dam Safety

DAM SAFETY REMEDIATION – MISSISSINEWA DAM, INDIANA

Mississinewa Dam was designed and constructed by the Louisville District for flood control and recreation in the 1960's. It is located on the Mississinewa River in northeastern Indiana about 80 miles northeast of Indianapolis, Indiana. The reservoir is part of the Upper Wabash flood control system and is operated in conjunction with the J. Edward Roush and Salamonie dams to provide benefits to the upper Wabash system. Mississinewa provides annual benefits of over $10 million for flood control and over $2 million for recreation with total annual benefits of $13.2 million. To date, the Mississinewa Dam has prevented more than $380 million of flood damages.

The dam was placed into operation in 1967 and operated without problems until 1988 when operations personnel observed deflections in the guardrail along the road over the crest of the dam.

Instrumentation evaluations at that time showed that most of the dam, including the highest section, had settled approximately 2½ inches, however about 300 feet of the embankment on the right side had settled approximately 4 inches. Extensive research into the design and construction records showed that the embankment in the area of greater settlement was founded on an overburden foundation about 20 feet above the limestone top of rock. In the ensuing years additional instruments were installed and additional explorations performed to determine the reason for the anomalous settlement. Finally, in 1999 during a routine reading of instruments on the dam it was discovered that some of the instruments had failed because of crushing due to the settlements of the embankment. Settlements in the 300-foot area had gradually accumulated to about 10 inches in the 300-foot area on the right side of the embankment. Operational restrictions on the reservoir were then implemented to reduce the risk to downstream areas. Additional investigations were performed and the final conclusion made that the overburden foundation for the embankment was gradually being eroded into openings in the limestone rock foundation. This gradual erosion could accelerate at any time and lead to dam failure.

A Major Rehabilitation Report was completed in August 2000 to secure additional funding to repair the dam and return the project to full operational capabilities. The selected repair was a concrete cutoff wall that was to be excavated through the embankment, the overburden foundation, and into the limestone rock. The excavation was to be continued to depths up to 180 feet, which are sufficient to eliminate the potential to erode materials into the limestone rock. As part of the report documentation and economic analyses necessary to justify the repairs it was determined that the downstream population at risk was greater than 15,000 people, the potential loss of life for a failure was estimated to be more than 80, and property damage for a failure was estimated to be $490 million.

The total cost of the selected remediation by cutoff wall was estimated to be over $46 million. In September of 2001 a contract was awarded to Bencor/Petrifond, a joint venture, from Dallas, Texas for just under $30 million. The design included a test section to prove that the contractor's methods and equipment were sufficient to complete the work.

During the work in the test section it was determined that grouting was necessary in advance of the cutoff wall to prevent the loss of bentonite slurry which is necessary for the excavation through the embankment and overburden foundation. The additional cost of this grouting is estimated be about $7 to $12 million. The cost of the grouting in combination with the $30 million award is still less than the authorized $46 million cost of the remediation project.

View of Hydrofraise Used For Rock Excavation

After completion of the grouting in the test area, the construction of the cutoff wall in the test area was completed without complications. Grouting will continue over the winter months during the winter shutdown of the cutoff wall operations. The cutoff wall construction will then resume next spring.

The dedicated efforts of the Corps of Engineers of the Louisville District are to be commended for the early detection and repair of Mississinewa Dam. The conditions that caused the increased settlement of the dam would have eventually led to catastrophic failure of the structure. This detection of an additional 1½ inches of settlement in one small area of the 8000-foot long dam gave engineers and geologists of the Louisville District additional time to evaluate the

situation. This in turn allowed the District to pursue funding and construction before emergency conditions developed. According to Bruce Murray, Louisville District Dam Safety Officer, " Without these extensive repairs to the dam, catastrophic failure would have only been a question of when". Protection of public lives and property is the most important goal of the Corps' dam safety program.

POC: STEVE HORNBECK, CELRL-ED-T-G, 502-315-6442

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Call for Technical Papers

WORKING RIVERS – BALANCED RESOURCE MANAGEMENT

The rivers of the world are constantly working to serve the public. Two United States Society on Dams (USSD) goals are to ensure that dams safely provide important benefits to society and to support the sustainable development of the nation's water resources. The theme of the 2004 USSD Conference will be ***Working Rivers - Balanced Resource Management***. The Conference will focus on how a working river meets a wide range of water resources objectives in a highly integrated manner. Topics for discussion include the management of reservoirs; operation of navigation systems in conjunction with storage reservoirs; construction, rehabilitation, operation, maintenance and monitoring of all related facilities; and consideration of economic, social and environmental concerns.

The 2004 USSD Conference will be held in St. Louis, Missouri, from 29 March through 2 April 2004, and organized by the United States Society on Dams, the U.S. National Committee of the International Commission on Large Dams. The Technical Program is being organized jointly by the USSD Committees on Construction and Rehabilitation, Environmental Effects, Hydraulics of Dams, and Public Awareness. Ronald A. Corso is the Chair of the Technical Program Committee.

USSD and ICOLD Members, as well as environmental, construction, equipment and financial professionals from around the world, are invited to submit Abstracts of papers related to the Theme. Abstracts will be accepted for either a 20-minute oral presentation or a Poster Session presentation. Authors of the accepted abstracts will be expected to submit a draft manuscript, 10 pages in length, for peer review by the Technical Program Committee. Following this review, authors will prepare final manuscripts. All papers will be published in the Conference Proceedings, including the Poster Session papers and those presented orally.

Submission of a final paper will constitute an agreement that the author will register for the Conference at the reduced author registration fee, attend the Conference and present the paper in person. (Co-authors will also be entitled to register at the reduced rate.)

To participate as an author, a 200-400 word abstract must be submitted to USSD by August 1, 2003. E-mail submission is preferred and should include:

paper title
author and co-author names and affiliations (list senior author first)
address, phone, fax and e-mail for all authors

Suggested Paper Topics

COMPREHENSIVE WATER MANAGEMENT

- Reservoir system analysis to meet changing demands - real-time reservoir operation
- Addressing conflicts in project purposes

- Development and operation of joint use reservoir agreements among competing interests
- Improvements in flood and drought forecasting
- Coordinated hydropower operations
- Reservoir management on rivers shared by different governmental jurisdictions

NAVIGATION SYSTEMS

- Navigation system development and evaluation
- Innovations in design, construction and rehabilitation of navigation system components
- Improvements in navigation system operation
- Flow augmentation for navigation from upstream reservoirs
- Multiple purpose developments and river systems

CONSTRUCTION, REHABILITATION, O&M AND MONITORING

- Safety and continued workability of all system operating components (gates, valves, etc.)
- Navigation related dredging and disposal issues
- Maintaining and monitoring navigation, flood control, hydropower, water supply and other facilities
- Wet construction, diversion, dewatering and coffer dams
- Navigation structures and rehabilitation/upgrades
- Scheduling, coordination and other operational issues

ENVIRONMENTAL, ECONOMIC AND SOCIAL ISSUES

- Regulation and Adaptive Management Programs to ensure water quality to support fisheries, aquatic life, and aquaculture, to mimic and enhance ecosystems, to implement ecosystem restoration, and to assist in flood control, navigation and other purposes
- Balancing environmental and general public use, and regulation to support recreation demands
- Sustainable design concepts and economic and social benefits from working rivers (relocation of people, communities and/or public activities due to maintenance, flood control operations or other development)
- Optimizing and balancing reservoir operations for environmental and human needs (power production, temperature, water supply, flood control, and fish passage and survivability)
- Public involvement, participation and notification in reservoir management decisions (long range planning and real time) and environmentally related dredging and disposal issues
- Dam decommissioning (environmental, economic, engineering/construction, restoration, sediment/stabilization, permitting, post-removal monitoring, and public/stakeholder and tribal/agency involvement)

2004 USSD CONFERENCE SCHEDULE

- Abstracts due: August 1, 2003
- Notify Authors: September 1, 2003
- Draft Papers Due: November 1, 2003
- Comments to Authors: December 1, 2003
- Final Paper to USSD: February 1, 2004
- Conference: March 29-April 2, 2004

Prospective authors are invited to submit 200-400 word abstracts for consideration to USSD at stephens@ussdams.org.

POC: CHARLES PEARRE, CECW-EI, 202-761-4645

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ENVIRONMENTAL CONSIDERATIONS FOR SUSTAINABLE DAM PROJECTS AND DAM SAFETY PROBLEMS AND SOLUTIONS -SHARING EXPERIENCES

The CIGB-ICOLD Seoul 2004 Organizing Committee is very pleased to invite members of the international dam community including engineers, scholars, and decision makers to participate in a symposium and workshop. The symposium will be held on May 20, 2004 and the workshop on May 18, 2004 at Sheraton Grande Walkerhill, Seoul, Korea during the ICOLD 72nd Annual Meeting.

You are invited to submit an abstract to present a paper in the symposium and/or workshop. The Organizing Committee welcomes submission of abstracts dealing with the topics below.

SYMPOSIUM
THEME: ENVIRONMENTAL CONSIDERATIONS FOR SUSTAINABLE DAM PROJECTS
DATE: MAY 20, 2004

The symposium will serve as a forum for reviewing and sharing current challenges and issues on dam projects from the member countries, and to developing strategies in compliance with sustainable development. As dam projects often face complications and issues caused by conflicts with conservation of the natural environment, the Organizing Committee as the theme for this symposium has chosen "Environmental Considerations for Sustainable Dam Projects". With this theme in mind, priority will be given to papers pertaining to the following topics.

Natural Environment
- Meteorology
- Hydrology (including groundwater)
- Morphology
- Reservoir sedimentation and shoreline erosion
- Downstream effect

Water Quality and Ecological Environment
- Water quality
- Biodiversity
- Rare and endangered species
- Wetlands
- Migrating fish
- Terrestrial and aquatic habitats

Socio-Economic Environment
- Public participation
- Economic impacts
- Recreation and tourism
- Land use
- Health
- Resettlement and land compensation

WORKSHOP
THEME: DAM SAFETY PROBLEMS AND SOLUTIONS -SHARING EXPERIENCES
DATE: MAY 18, 2004

Recently, assurance of dam safety due to global climate changes and increased flooding has become very important, and has emerged as a significant issue in many countries. To focus attention on this very important issue and to share practices and experiences among the (COLD member countries, a half-day workshop shall be organized by the CCOLD Seoul 2004 Organizing Committee. Specific subjects of the workshop are as follows.

Dam Leakage Problems and Treatment

Hydro-meteorological Extremes and Dam Safety

During the Workshop, several invited speakers from relevant member countries will present their experiences on the subject. In particular, the Korea National Committee on Large Dam (KNCOLD) will present some recent experiences concerning a leakage control project for dams, the progress of an enhancement project on dam safety, and the incremental flood control capacity of the Soyanggang Dam. Sufficient time will be allotted for technical discussions on the subject.

PROCEDURE FOR SUBMITTING PAPERS

1. Abstract Submission

Potential authors should submit a 300-word abstract of their paper in English no later than August 31, 2003. Abstract submission will be received using on-line process, which will be available at the official homepage (http://www.icoId2004-seoul.or.kr) as of July 1, 2003 and email (icold2004@icold2004-seoul.or.kr) before and after July 1, 2003.

The entire abstract, including title, text, complete name(s), affiliation, and country of the first author and co-authors, must be typed in the "Arial" font. Abstracts should be prepared according to the "instructions to authors" provided on the next page. Please find attached "Abstract Submission Form".

2. Notification of acceptance

Authors of selected papers will be notified by October 31 2003. Notification of acceptance will be sent by e-mail to the submitting authors.

3. Full Paper Submission

The selected authors must submit their full manuscript by January 31, 2004. Full papers should be prepared according to the instructions provided on the next page. Presentations will be in French or English with simultaneous translation.

POC: CHARLES PEARRE, CECW-EI, 202-761-4645

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Information

VACANCY ANNOUNCEMENTS

The following job vacancy announcements are currently open. Interested individuals should insure that their RESUMIX information is current and apply for the positions in accordance with the announcements.

Supervisory Hydraulic Engineer – The Memphis District is recruiting a Supervisory Hydraulic Engineer, GS-0810-14 for Hydraulics and Hydrology Branch, Engineering, in Memphis Tennessee. The individual will serve as the branch chief and as consultant and technical advisor to the Chief, Engineering Division, and the District Engineer on hydrologic, hydraulic, sedimentation, and water

quality matters. Represents the Memphis District at conferences and meeting attended by representative of HQUSACE, MVD, other Corps districts, ERDC, National Weather Service, Environmental Protection Agency, U.S. Geological Survey, NRCS, and other Federal, state, and local agencies. Often is the principle representative of the District in these meetings. The individual is responsible for planning and supervising studies, research, analyses, and hydraulic designs. Determines the design requirements of flood control and channel improvement projects including levees, floodgates, floodwalls, pumping plants, siphons, reservoir spillways, intake and outlet works, stilling basins, erosion control structures, and channels. Responsible for planning hydrologic studies to prepare isohyetal maps, mass rainfall curves, and time-area-depth curves for storms to determine rainfall intensities and frequencies, volume of runoff from rainfall, distribution of runoff, and to improve flood routing under natural and modified conditions. Directs studies and activities in connection with the sedimentation program of the District. As a Supervisory employee, incumbent is responsible for (1) instruction and training 20-30 employees in the safe and efficient performance of their duties and (2) studying operations directed with a view of correcting, or reporting for correction, any unsafe condition or practice that may cause injury to employees, other persons, or property damage. Fully supports Project Management through participation in the District Project Management Council. The announcement closes 30 June 2003.

POC: DENNIS J. KAMPER, CEMVM-E, 901-544-3227

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THE GEOTECHNICAL CORNER

The Corps is evolving to meet new missions, changes in communications, and management practices. Our geotechnical community of practice is adjusting to accommodate this evolution. Today, we are using a collaborative practice to link Headquarters with the MSC's, the Laboratories, and the Districts. Our goal is to help engineering and geologic functions at the Districts to execute their mission with competent tools.

Headquarters is responsible for policy, criteria, and training. In addition, it provides congressional and Department of the Army support, and provides international representation. The MSC focus is policy compliance, program support, and collaboration with the Districts. The Laboratories research new criteria, develop competent tools, and serve as a cadre of theoretical expertise. Our Districts execute the mission, provide feedback on needs, and serve as a cadre of practicing expertise.

In October 2001, Headquarters and the MSC's geotechnical leadership started meeting quarterly to define and establish the collaborative practice. It recognized that the key ingredient for success is interaction and feedback from the Districts. It is the Districts that execute the mission and success rests on knowing what Districts need to execute their mission.

In support of the Corps' goal to be a Learning Organization, and within an objective to develop a Technical Excellence Network, HQ is developing a web-base community of practice. Through the web, HQ plans an interactive community activity to the most junior level to share practices, facilitate training, and seek that feedback essential to success. Our goal is to have a rudimentary portal available through the E&C web page by FY 2004.

In the interim, your MSC point of contact will interact with District geotechnical chiefs to seek needs. As you identify needs, please convey these issues through your chiefs.

During the past year, this collaborative process has responded to a few of the District needs. This past summer, the Corps renewed the Intensive Geotechnical Engineering Course. Twenty engineers attended the 8-week course at Virginia Tech and all had a good, albeit, busy time.

Also, Headquarters has proposed an 8-week Intensive Geological Engineering Course scheduled for May 2004. Contact either michael.j.klosterman@usace.army.mil or david.a.pezza@usace.army.mil for the details. It is designed for geologists and includes reviews in math and software, but is open to engineers.

Along with EM 1110-2-1902, Stability of Earth and Rock Dams, EM 1110-2-2300, Design and Construction Considerations for Dams, EM 1110-2-3800, Rock Excavation and Blasting, and ETL 1110-2-XXXX, Dam Instrumentation Automation, due for publication in FY03, ERDC is developing earthquake guidance. They are drafting EC 1110-2-6000, Selection of Design Earthquake and Ground Motions, and EC 1110-2-6001, Seismic Stability of Earth and Rock Dams. In addition, MVS is drafting ETL 1110-2-561, Reliability Analysis and Risk Assessment Examples for Seepage and Slope Stability Failure Modes for Embankment Dams in support of EP 1130-2-500, Partners and Support, Appendix D, Geotechnical Engineering Reliability.

Headquarters is also creating a Committee on Seepage. The committee will consist of 19 members, one from Headquarters, two from MSC's, two from ERDC, and 14 from the Districts. This is in response to numerous issues pertaining to internal erosion and piping in dams and levees. The committee will facilitate a more collaborative use of Corps expertise to address our policy, criteria, and remediation pertaining to seepage.

Headquarters developed geotechnical design-build guidance for inclusion to Unified Facilities Criteria for Tactical Equipment Maintenance Facilities for Two-Phase Design-Build RFP procedures (http://www.hnd.army.mil/techinfo/index.htm). The document is a model for other military projects. The guidance has two volumes. Volume 1 is a guide for preparing a project management plan. Volume 2 is a model request for proposals for developing technical requirements. It includes recommendations on what kind of geotechnical information is needed. The purpose is to provide sufficient geotechnical information for contractors to make an adequate cost proposal.

POC: DAVID PEZZA, CECW-EW, 202-761-4889

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CONSTRUCTION USERS ROUND TABLE (CURT) MEMBERS MEET WITH HQUSACE

An Informal benchmarking meeting with owner members of the Construction Users Round Table (CURT) was held on 16 May 2003 at HQUSACE. The purpose of this meeting was for industry leaders to assist USACE in exploring ways to more effectively support the Army and the nation in the future.

CURT participants included construction Vice Presidents of DuPont, Dow Chemical, Johnson & Johnson, ExxonMobil, Merck, and American Electric Power. USACE staff included MG Van Winkle (Deputy Commanding General), MG Cheatham (Deputy Chief of Engineers for Reserve Affairs; Acting Director, Military Programs), Dwight Beranek (Deputy Director, Military Programs), Dr. Mike O'Connor (Director, Research and Development), Bruce Elliott (Chief, Command Planning Group), Phil Hunt (Military Programs), Don Kisicki (Chief, Interagency Services Branch, Bob Bank (Engineering and Construction Division), and Ted Kanamine, Facilitator (Command Planning Group),

There was an excellent exchange of ideas with potential application to USACE, especially in the Military Construction mission. Additional similar meetings on specific topics will be planned. A report of discussions and recommended follow-ups is currently being coordinated.

POC: ROBERT BANK, CECW-EE, 202-761-4243

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ENVIRONMENTALLY FRIENDLY AND DURABLE COATINGS

Two recent articles on how to use the Corps Spec process to specify low VOC (Environmentally Friendly) durable paint have been published in the latest issue of the Engineering Automation Research Update. You can find the two articles at the following web pages:

Read "Specifying Paint" by Al Beitelman at
http://www.cecer.army.mil/EARUpdate/NLFiles/2002/Paint.cfm.

Read "Specifying Environmentally Friendly Paint" by Eric D. Johnson and Annette L. Stumpf at
http://www.cecer.army.mil/EARUpdate/NLFiles/2002/LowVOCPaints.cfm.

POC: ANDY WU, CECW-EI, 202-761-0237

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NEW PUBLICATIONS

All new publications issued by HQUSACE are now issued electronically. This results in some offices not knowing about new publications for some months after the official issue date of the publication. Corporate Information (CECI-IV) maintains a list of new publications issued in the last 180 days on the Internet at http://www.usace.army.mil/inet/usace-docs/new-pubs/.

In order to assist Engineering and Construction offices in obtaining the latest publications, we will include a listing of the newest publications in each issue of the E&C News. The lists in this issue include all publications issue from 11 November 2002 through 31 May 2003.

New Engineer Circulars

PUB.NUMBER	PGS	PROPONENT	TITLE	PUB.DATE	EXP.DATE
EC 11-1-114	020	CECW	Value Management (VM)/Value Engineering (VE)	28 Feb 03	31 Mar 05
EC 25-1-304	008	CECI-TR	Information Management - Office Symbols	31 Dec 02	31 Dec 03
EC 25-1-307	001	CESO-I	Information Management - Rescission	30 May 03	30 Apr 04
EC 1105-2-404	006	CECW-P	Planning Civil Work Projects Under the Environmental Operating Principles	01 May 03	30 Jun 04

New Engineer Manuals

PUB.NUMBER	PGS	PROPONENT	TITLE	PUB.DATE
EM 1110-1-1200	051	CECW-ET	Conceptual Site Models for Ordnance and Explosives (OE) and Hazardous, Toxic, and	03 Feb 03

			Radioactive Waste (HTRW) Projects	

New Engineer Pamphlets

PUB.NUMBER	PGS	PROPONENT	TITLE	PUB.DATE
EP 385-1-95b	050	CESO	Explosives Safety Submission	28 Mar 03
EP 715-1-4	25	CECW-ET	Competing for Architect-Engineer Contracts Awarded by the U.S. Army Corps of Engineers	31 Dec 02
EP 1130-2-540	105	CECW	Environmental Stewardship Operations and Maintenance Guidance and Procedures	04 Nov 02 (change 1)

New Engineer Regulations

NUMBER	PGS	PROPONENT	TITLE	PUB.DATE
ER 15-1-43	002	CECW	Boards, Commissions, and Committees - United States Army Corps of Engineers Acquisition Corporate Group	28 Feb 03
ER 37-1-29	154	CERM	Financial Administration - Financial Management of Capital Investments	30 Nov 02
ER 37-3-22	006	CERM	Financial Administration - Carryover Supervision and Administration (S&A)	02 Jan 03

New Engineer Technical Letters

PUB.NUMBER	PAGES	PROPONENT	TITLE	PUB.DATE
TL 1110-1-189	038	CECW	Use of Geogrids in Pavement Construction	14 Feb 03

POC: LIZ PANNELL, CECI-IV, 202-761-5974

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NEW ENGINEERING AND CONSTRUCTION BULLETINS

All Engineering and Construction Bulletins are posted on the TechInfo website (http://www.hnd.usace.army.mil/techinfo/ECbull.htm) along with the previous ECB's. Individuals should direct questions concerning the ECB to the individual indicated with the ECB. General questions may be directed to the individual POC listed below.

In order to assist Engineering and Construction offices in obtaining the latest bulletins, we will include a listing of the newest bulletins in each issue of the E&C News. The list in this issue includes all bulletins issued from 11 November 2002 through 31 May 2003.

Engineering and Construction Bulletins

BULLETIN NUMBER	DATE ISSUED	TITLE
2002-25P	Undated	Technical Paper: Lifting Chain Design for Tainter Gates and Roller Gates

2002-32	9 December 02	Construction Contract Durations & Schedule Slippage
2002-33	16 December 02	Wire Rope Failure - John Day Lock Upstream Lift Gate
2003-1	15 January 03	Architect-Engineer Responsibility Management Program (AERMP)
2003-2	21 February 03	Latest Versions of Technical Instructions (TI) and Unified Facilities Criteria (UFC) Documents
2003-3	3 March 03	ICC International Plumbing Code
2003-4	27 February 03	Value Engineering on Military Construction Design-Build Projects
2003-5	12 March 03	Submitting and Processing Criteria Change Requests
2003-6	14 March 03	Scheduling Requirements for Testing of Mechanical Systems in Construction Contracts
2003-7	To be published	
2003-8	11 April 2003	DD Form 1391 Preparation Planning Charrette Process (Text and Appendix A - D)
2003-8E	------	DD Form 1391 Preparation Planning Charrette Process (Appendix E)
2003-9	30 May 2003	Partnering
2003-10	21 May 2003	Unified Facilities Criteria (UFC) 3-600-01, Fire Protection Engineering for Facilities, 17 April 2003
2003-11	21 May 2003	Lighting Controls
2003-12	28 May 2003	New Barracks Criteria

POC: DON EVICK, CECW-ET, 202-761-4227

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Upcoming Regional and National Meetings and Conferences

CORPS GROUNDWATER MODELING WORKSHOP

The Corps Hydrologic Engineering Center, CEIWR-HEC, in Davis CA is planning a workshop on Groundwater Modeling 14-18 July 2003. The workshop will be taught by experts in groundwater modeling from HEC, ERDC, and the profession. The workshop is being held as a response to requests by participants in the Groundwater Hydrology PROSPECT courses and from the field. The Groundwater Modeling PROSPECT Course is not scheduled for the next couple of years.

Computer models of groundwater flow are applied to a wide variety of projects within the Corps of Engineers. This includes HTRW clean-up, water resource management, salt-water intrusion, interaction between surface water and groundwater, reservoir design and operation, and watershed management. This workshop will focus on the development and application of computer models for

the purpose of planning, design, operation, and evaluation. Topics include: site characterization and conceptual model development, integration of data into a computer model, selection of boundary conditions, model calibration, model application, common errors in computer modeling, and limitations of computer modeling. The industry-standard U.S Geological Survey finite-difference three-dimensional groundwater flow model MODFLOW will be introduced to course participants through lectures and computer workshops. User interfaces with MODFLOW, such as the Groundwater Modeling System (GMS), will also be included.

This workshop will serve as an introduction for Corps personnel interested in hands-on applications. Additionally, project managers in an oversight role will be provided with an enhanced understanding of the development, application, and limitations of computer models of groundwater flow. A basic level of understanding of hydrogeology is required. Completion of the PROSPECT course entitled "Groundwater Hydrology" meets this requirement.

At the end of the workshop, participants will: understand the steps involved in developing and applying a groundwater flow model; be able to construct simple MODFLOW applications and interpret results; have an improved ability to critically review modeling projects. Documentation, tutorials, and tools which will enable future personal development of groundwater modeling skills will be provided.

Interested persons should contact Jon Fenske, Hydraulic Engineer, Hydrologic Engineering Center, (530) 756-1104.

POC: JON FENSKE, CEIWR-HEC-HH, 530-756-1104

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DAM SAFETY 2003

The annual Association of State Dam Safety Officials conference, Dam Safety 2003, will be held at the Hyatt Regency, Minneapolis, Minnesota, starting Sunday, September 07, 2003.

Dam Safety 2003 will be ASDSO's 20th Anniversary Conference, and you are invited to share in the celebration!

Please mark your calendars for September 7-10 at the beautiful Hyatt Regency in downtown Minneapolis, Minnesota. All those interested in the latest policy and technical information on dam safety in the US should plan to attend and take advantage of the top-notch technical sessions, an abundance of networking opportunities, and a sophisticated urban conference venue.

The conference announcement and registration form may be downloaded from the ASDSO web site at http://www.damsafety.org.

POC: CHARLES PEARRE, CECW-EI, 202-761-4645

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Training

FY2003 PROSPECT COURSES

A wide variety of technical and professional development courses are available through the USACE Proponent Sponsored Engineer Corps Training (PROSPECT) Program. Information about the FY03 program can be found online at: http://pdsc.usace.army.mil under *Class Schedules*.

To enroll, first discuss this with your supervisor and then contact your local training coordinator. Your training coordinator can guide you through the registration process and inform you of any deadlines applicable in your organization as well as all local procedures that you must follow to register.

If a course is full, you may request to be put on a waiting list and you will be informed when a space becomes available.

POC: JOHN P. BUCKLEY, CEHR-P-T, 256-895-7431

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MISSION TO THE S.T.A.R.S.

A two-day Experiential Program with Space Simulation conducted at the Space and Rocket Center in Huntsville, Alabama. Listen to what three recent STARS participants have to say about their experience:

> *"This was hands-down, the best government training class I have ever been to! I say this not just because it was fun but also because I can't think of a better way to learn about leadership than the way we did—working together."*
>
> *"I believe it was the best teambuilding/ leadership course that I or the others have had the opportunity of attending."*
>
> *"I am encouraging anyone who asks me about it to attend the class."*

This dynamic 2-day seminar challenges participants to plan and execute a simulated rescue as a **"Scientific Team of American Rescuers in Space" (STARS)**. The simulation provides opportunities to demonstrate leadership during critical times. It will also require participants to work together in teams, to change behaviors and processes, possibly even to design their future—just as the NASA teams did a few years ago.

Who Should Attend: The program is open to managers and teams who are in leadership roles. Usually GS-12's to 15's attend; however, intact teams representing various GS grade levels are appropriate.

Location: The program will be conducted at the Space and Rocket Center in Huntsville, Alabama. Lodging is provided at the adjacent Huntsville Marriott.

Cost and Length: $1,825; Two full days. 10% discount for teams of four or more. Tuition includes 3 nights at hotel, working breakfasts, luncheons, dinners, and all program materials.

ONLY 32 spaces available for each 2-day program. Choose from these Session Dates
December 3-4, 2003
March 10-11, 2004

To register, call 1-304-870-8008
For detailed program information, contact Kathleen Cole, Program Director, at 1-304-870-8049.

To learn more, view an agenda, and see a multimedia Flash presentation of the STARS program, click here: http://www.leadership.opm.gov/content.cfm?CAT=MTS

Conducted by: U.S. Office of Personnel Management's Eastern Management Development Center

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HOMELAND DEFENSE: UNDERSTANDING THE ENEMY

The "War on Terrorism" will continue well into the future and according to Homeland Defense Director Ridge, the homeland defense efforts in response to this war will involve approximately 200,000 Federal employees. Some of these employees will be assigned to homeland defense duties on a full-time basis, but most will have related duties incorporated into their current position responsibilities.

The primary objective of this seminar is to provide information on the general nature of terrorism and the specific threats to the United States to personnel who are assigned homeland security responsibilities. The seminar is designed primarily for Government personnel who have not worked in areas related to terrorism, counteraction, or homeland defense.

Some Key Results

*Understanding of the dynamics of terrorism and the current terrorist threats to the United States
*Provide an overview on the history of terrorism, especially during the past several decades
*Learn how other countries deal with this threat
*Discuss the U.S. Homeland Defense program and the role the federal agencies supporting the program

Who Should Attend -- Managers and senior specialists with homeland security, counter terrorism, law enforcement or intelligence responsibilities. State and local officials would benefit from this program

When and Where -- Jul 28 - Aug 1, 03 at EMDC in Shepherdstown

How to Apply: Register online at http://www.leadership.opm.gov/content.cfm?CAT=HD2 or call 304-870-8008.

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EMOTIONAL INTELLIGENCE AS A LEADERSHIP SKILL

An additional session in Denver (July 21 - 25) has been added for this seminar, due to popular demand. This is the one seminar that is recommended for ALL Federal employees.

Most of us have been conditioned to believe that emotions are not welcome in the workplace; that team and work decisions should be based upon cold, logical reason. True professionals, we're told, "leave their emotions at home." Yet leadership research tells us that the lack of interpersonal skills and the inability to adapt are the two principal derailment factors in careers.

In this course, participants will see how forward-looking organizations, such as the Canadian Men's Olympic Volleyball Team, Kaiser Permanente, State Street Bank, American Express and Nichol Aluminum, are accessing the power of emotions to create better, more productive teams and team members.

Some Key Results

* Prepare an assessment of your own correct EQ competence level
* Analyze your relationships with significant others in your work environment, and create plans to enhance those relationships
* Create an action plan to develop more cohesive relationships with team members
* Practice playing to your strengths and managing your weaknesses so that they become non-factors in your performance

Who Should Attend --- All Federal employees

When and Where --- Jul 21 - Jul 25, 2003 at the Western Management Development Center in Denver

For more information or to sign up on line, go to:
http://www.leadership.opm.gov/content.cfm?CAT=EI

Call for space availability: 888-676-9632 or 304-870-8008.

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Open Discussion and Comments

COMMENTS OF TECHNICAL CAPABILITY ASSESSMENTS

The following comment was received from the Omaha District is response to the information on Technical Capability Assessments in the October-November 2002 issue of the Engineering and Construction News –

> I was a little disappointed that Centers of Expertise (MCX and DX) were not mentioned in Dwight's notes on Technical Capability Assessments and the article on Corps Construction Capabilities in the Oct-Nov E&C News. I strongly believe MCX's and DX's play an important part in not only the assessment of Corps' capabilities but in also mentoring/coaching designers and QA representatives. Os did this exceptionally well. He did not wait to be asked or wait for funding, he just did it. Os always was able to get some funding from the districts and some funding from the TSMCX. Today it is very difficult to get any funding out of construction. There are a few exceptions: Cannon AFB Runway (CESPA), Mt Home AFB Runway/Apron (CENWS), Pope AFB Apron/ALZ (CESAS), Wright-Patterson AFB Apron (CELRL) and Eielson AFB Runway (CEPOA).
>
> I was especially disappointed that MCX's were not mentioned when discussing Corps' construction capabilities. MCX's are greatly underutilized in this area, particularly in airfield pavement construction. Use of TSMCX for construction assistance is a very efficient and cost effective way to satisfy customers and minimize construction deficiencies/performance

problems. I am sure HQUSACE will hear this when Jim Greene and the AF team visit HQ to discuss airfield pavement construction concerns.

This would be a good time to push central funding (S&A funds) for the TSMCX to provide limited technical support to Corps districts for critical airfield pavement construction. This would include funding on-site 3-day airfield paving workshops and one week on-site follow-up inspections by TSMCX and MAJCOM Pavements Engineer.

(Editors' note: If you want to share your thoughts with our readers regarding a subject of general interest, send an email to the E&C News editor at charles.pearre@usace.army.mil. A synopsis of your comments will be published next time).

Editors' Notes

FUTURE THEMES

Future regular issues of the Engineering and Construction News will be issued every two months; with special issues published as needed. Suggestions for themes for future issues of the News are needed. Please send your suggestions to the POC shown below.

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SUBSCRIBE TO ECNEWS

Engineering and Construction News uses a subscription list on the Corps List Server. The name of the list is LS-ECNEWS. The purpose of the list is to distribute the Engineering and Construction community newsletter, *Engineering and Construction News*.

You can subscribe or unsubscribe to LS-ECNEWS by sending an e-mail message to majordomo@lst.usace.army.mil with no subject line and only a single line of text in the message body. That single line of text should have the following format: **subscribe ls-ecnews** or **unsubscribe ls-ecnews**. The List Server system will automatically pick up your originating e-mail address from the message and add it to or delete it from the distribution list.

If you have any questions about the list server, contact the List Server E-Mail Delivery System by e-mail us by *weblord@usace.army.mil* or calling 503-808-4968. Or you may contact Charles Pearre if you have additional questions on the subscription list.

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